

# Creating a simple Mesh

Once you have flashed and pointed your devices to your Radiusdesk Server as explained [here](#) , you can now pull these devices into a mesh. In this tutorial we will set up a simple mesh without a captive portal that requires usernames and passwords.

## Add a New Mesh

- Click on the MESHdesk icon on the Radiusdesk home page.

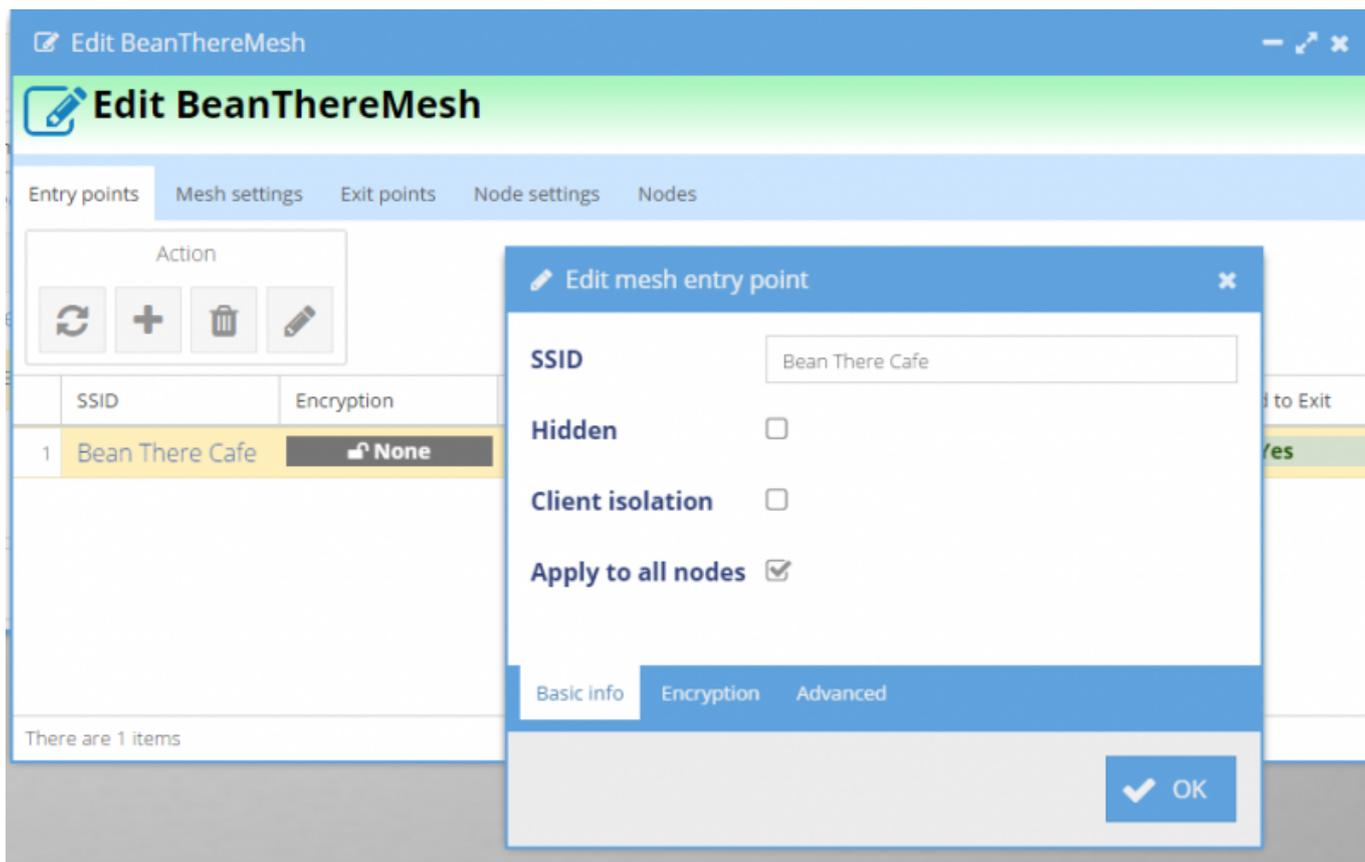


- Click the Add button in the actions toolbar. A New Mesh window opens.

A screenshot of the MESHdesk web interface. The main window has a blue header with the MESHdesk logo and navigation tabs for "Meshes", "Known\_Nodes", and "Unknown Nodes". Below the header is an "Action" toolbar with icons for refresh, dropdown, add (+), delete, edit, and search. A table lists existing meshes: "Meerkat", "cip", "Cheetah", and "BeanThereMesh" (highlighted in yellow). A "New mesh" dialog box is open in the foreground, containing fields for "Owner" (set to "Logged in user"), "Name" (set to "Bean There Mesh"), and a checkbox for "Also show to sub providers". At the bottom of the dialog are "Previous" and "Next" buttons. The background table also has a "Notes" column with red bars.

- Select yourself (loggedin user) as the owner of the Mesh and click NEXT
- Give a name to the Mesh you are creating. We will use Bean There Mesh as a sample.
- Click NEXT. The Mesh is now created.

- Click on the Bean There Mesh in the MESHdesk window and click on Edit in the Action Toolbar.
- Look at the tabs in the Edit window. We will follow the tabs to set up the details of the Mesh.

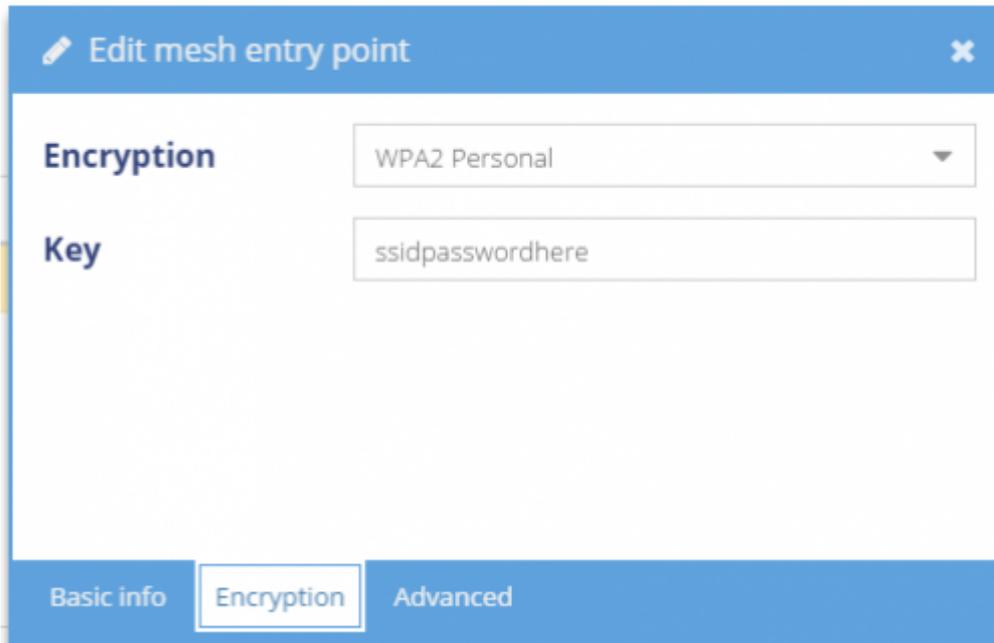


## Add an Entry Point

An Entry Point will allow users to enter onto the Mesh network.

- Click on the Entry Points Tab in the Edit Mesh Window.
- Click Add on the Actions Toolbar in the Entry Points Tab. A New Entry Point window opens.
- Fill in a Name for the SSID, example Bean There Wifi.
- If you want the WiFi to be hidden to the public then select the Hidden tickbox.
- Select Client isolation tick box so that users cannot connect to each others' devices.
- **Or** deselect the Client Isolation tick box in an office where users must be able to print to a wireless printer.
- Select Apply to all nodes to make sure the SSID is available over the whole mesh.
- Click OK.

## Encryption- to give the mesh a password



The screenshot shows a window titled "Edit mesh entry point" with a close button (X) in the top right corner. The window is divided into three tabs: "Basic info", "Encryption", and "Advanced". The "Encryption" tab is currently selected. Under the "Encryption" tab, there are two fields: "Encryption" and "Key". The "Encryption" field is a dropdown menu with "WPA2 Personal" selected. The "Key" field is a text input box containing the placeholder text "ssidpasswordhere".

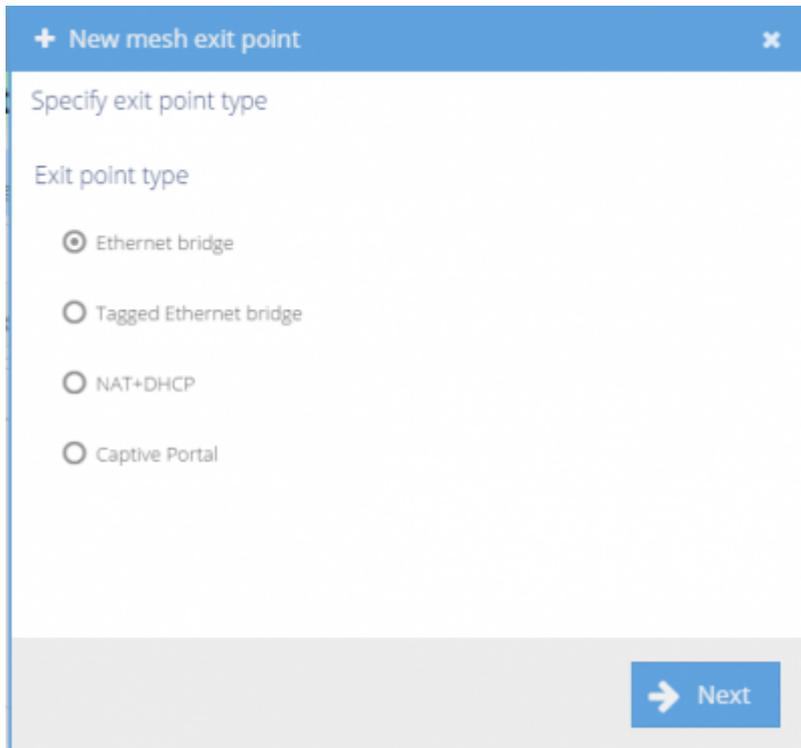
- Click on the Encryption sub-tab in the EditMesh Entry Port Window.
- Select **None** if you want users to login without giving a password.
- Select **WPA2 Personal** and supply an **8 letter password** if you want to secure the Wifi.

## We suggest you leave the Mesh Settings and Batman Adv Settings on default

### Add Exit Points

An Exit Point allows users from the Mesh Network onto the world wide web.

- Click on the Exit Points tab



- Select the type of Exit Point you have onto the internet.
  - Select the Ethernet Bridge button if you have an Ethernet cable supplying internet.
  - Select the Tagged Ethernet Bridge if your Ethernet connection gives a VLAN number.
  - Select NAT + DHCP if you connect to a DHCP server.
- We will cover the Captive Portal in the [next](#) How To.
- We will keep our selection on **Ethernet bridge** for this How To.
- Click NEXT

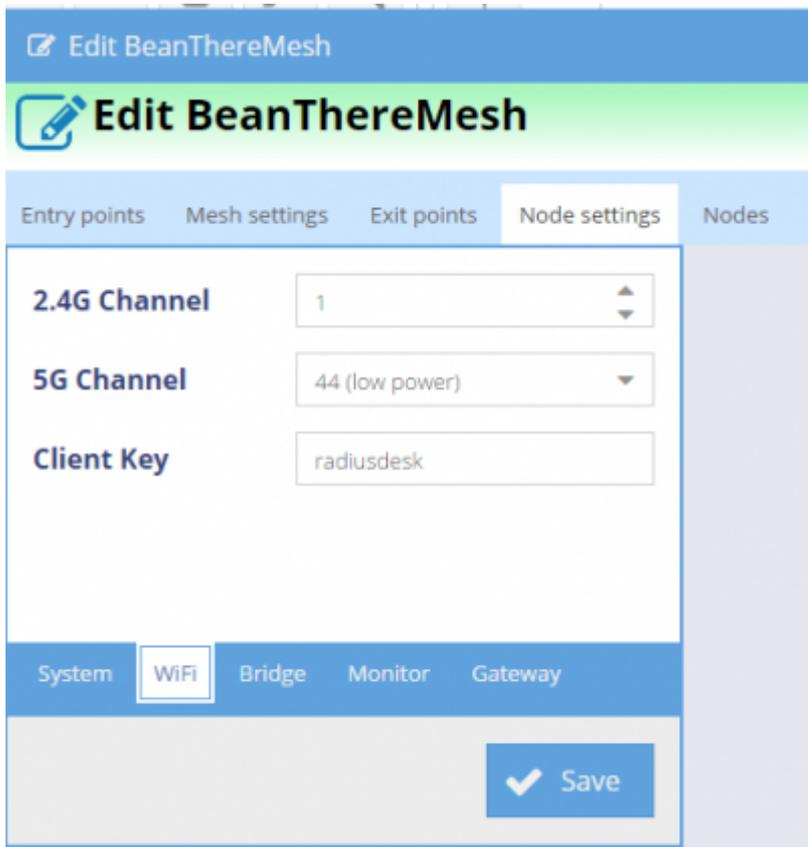
## Node Settings- VERY IMPORTANT

- Click on the Node Settings Tab in the Edit Mesh Window.
- Under the Node settings Tab we will cover two sub-tabs: System and Wifi.

The screenshot shows the 'Edit BeanThereMesh' interface. At the top, there is a blue header with a pencil icon and the text 'Edit BeanThereMesh'. Below this is a green banner with a pencil icon and the text 'Edit BeanThereMesh'. The main content area has a light blue background with a navigation bar containing 'Entry points', 'Mesh settings', 'Exit points', 'Node settings', and 'Nodes'. The 'Node settings' tab is active. Below the navigation bar, there are three form fields: 'Password' with the value 'admin', 'Country' with a dropdown menu showing 'South Africa', and 'Timezone' with a dropdown menu showing 'Africa/Johannesburg'. At the bottom of the form, there is a blue bar with sub-tabs: 'System', 'WiFi', 'Bridge', 'Monitor', and 'Gateway'. A blue 'Save' button with a checkmark icon is located at the bottom right of the form.

- In the System sub-tab:
- Fill in the Root User/ Top Level Access Provider Password into the Password field. This gives you access to the router/node.
- Select the country where the router/node is installed.
- Select the Time Zone of that location. This is EXTREMELY IMPORTANT as this timing is used for all the accounting of data.

\* Click on the WiFi sub-tab



- In the 2.4 Channel field we suggest you leave the counter on 1. If your country does not allow 1 then try 6 or 11.
- In the 5 Channel field we suggest you leave the power on 44(low power).
- Click SAVE

## Add the Nodes to your Mesh

You can add a node to your mesh by clicking on the **Nodes tab** in the Edit Mesh window and filling in a known MAC address **or** take the automated route by following these instructions:

[Add the nodes to the Mesh on Meshdesk](#)

From:  
<https://radiusdesk.com/docuwiki/> - **RADIUSdesk**

Permanent link:  
[https://radiusdesk.com/docuwiki/user\\_guide/md\\_new\\_simple\\_mesh](https://radiusdesk.com/docuwiki/user_guide/md_new_simple_mesh)

Last update: **2016/06/26 23:16**

